

Line Impedance Stabilization Networks / Artificial Mains Network CISPR25 / ISO7637, Single line, 25A to 400A



LISN (Artifical Mains Network) is a low-pass filter typically placed between an AC or DC power source and the EUT (Equipment Under Test) to create a known impedance as per complying standard for the measurement of conducted emission. It also isolates the unwanted RF signals from the power source with pre-filter included. It provides a Radio frequency (RF) noise measurement port.

In addition LISN is used to predict conducted emission for diagnostic, pre-compliance and compliance testing.

Scientific designs and manufactures models in compliance with CISPR 16-1-2/25, EN, ANSI C63.4, FCC, ETS, VCCI and VDE, MIL461E/F standards and automotive for measurements in commonly used Standards.

These single line LISNs are used in automotive industries and test labs for measurement of interface voltages in vehicles. EVs, Ships, Aircrafts etc. The characteristic impedance is designed as per CISPR16/25 of these LISNs is $(5\mu H + 1\Omega) \parallel 50\Omega$

These LISN also can be used in immunity test by bulk current injection and transients as per ISO7637-2 standards.

A Transient limiter is highly recommended to use with LISN at the front end of EMI Rx or Spectrum Analyzer to protect measuring instrument from transients.

Technical Specifications

Model	SMLIN25-1A	SMLIN100-1A	SMLIN200-1A	SMLIN400-1A
Frequency Range	100 kHz – 150 MHz			
Maximum Load Current				
Continuous Current	25 A	100 A	200 A	400 A
Peak Current (15 min)	50 A	120 A	225 A	425 A
Maximum Input Voltage				
DC	600 V			
AC	300 V @ 50/60 Hz 130 V @ 400 Hz, 250 V @ 400 Hz (Optional)			
AMN Impedance	(5 μH + 1 Ω) 50 Ω ± 10%			
DC Resistance mains to EUT	< 10 mΩ	< 5 mΩ		
Impedance @ 50Hz	< 10 mΩ	< 5 mΩ		
Impedance @ 400Hz	< 20 mΩ	< 15 mΩ		
Standard Reference	CISPR16-1-2/25, MIL461E/F, ISO 7637-2 Transients, BCI, DO-160			
RF Output Connector	N Type (F) Connector			
Mains Input & Output Terminals (EUT)	Wing Terminal, Optional : Supercon			
All LISNs are provided with manufactu	rer's calibration data			

Available Options :

- 50Ω, 50W Termination
- Transient Limiter : -10dB, -20dB
- Calibration Certificate traceable to ISO/IEC 17025 standard





